

**ABSTRACT**

The invention relates to a network interface system for interfacing a host system with a network. The network interface system includes a bus interface system, a media access control system, and a security system. The network interface offloads IPsec processing from the host processor. According to the invention, the security system includes two processors for encrypting and authenticating the outgoing data. Outgoing data packets are sent alternately to one or the other processor, whereby transmission processing can be accelerated relative to receive processing.

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